

SEQUENCE LISTING

<110> MARBAN, EDUARDO

<120> SOMATIC TRANSFER OF MODIFIED GENES TO PREDICT DRUG  
EFFECTS

<130> 47728(1699)

<140> 09/187,669

<141> 1998-11-05

<150> 60/064,893

<151> 1997-11-07

<160> 2

<170> PatentIn Ver. 2.1

<210> 1

<211> 630

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: Mammalian ion  
channel protein

<400> 1

Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala

1 5 10 15

Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg

20 25 30

Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser

35 40 45

Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp  
50 55 60

Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr  
65 70 75 80

Gln Gln Tyr Phe Phe Asp Arg Asp Pro Asp Ile Phe Arg His Ile Leu  
85 90 95

Asn Phe Tyr Arg Thr Gly Lys Leu His Tyr Pro Arg His Glu Cys Ile  
100 105 110

Ser Ala Tyr Asp Glu Glu Leu Ala Phe Phe Gly Leu Ile Pro Glu Ile  
115 120 125

Ile Gly Asp Cys Cys Tyr Glu Glu Tyr Lys Asp Arg Arg Arg Glu Asn  
130 135 140

Ala Glu Arg Leu Gln Asp Asp Ala Asp Thr Asp Asn Thr Gly Glu Ser  
145 150 155 160

Ala Leu Pro Thr Met Thr Ala Arg Gln Arg Val Trp Arg Ala Phe Glu  
165 170 175

Asn Pro His Thr Ser Thr Met Ala Leu Val Phe Tyr Tyr Val Thr Gly  
180 185 190

Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Val Pro  
195 200 205

Cys Gly Ser Ser Pro Gly His Ile Lys Glu Leu Pro Cys Gly Glu Arg  
210 215 220

Tyr Ala Val Ala Phe Phe Cys Leu Asp Thr Ala Cys Val Met Ile Phe  
225 230 235 240

Thr Val Glu Tyr Leu Leu Arg Leu Ala Ala Ala Pro Ser Arg Tyr Arg  
245 250 255

Phe Val Arg Ser Val Met Ser Ile Ile Asp Val Val Ala Ile Leu Pro  
260 265 270

Tyr Tyr Ile Gly Leu Val Met Thr Asp Asn Glu Asp Val Ser Gly Ala  
275 280 285

Phe Val Thr Leu Arg Val Phe Arg Val Phe Arg Ile Phe Lys Phe Ser  
290 295 300

Arg His Ser Gly Gly Leu Arg Ile Leu Gly Tyr Thr Leu Lys Ser Cys  
305 310 315 320

Ala Ser Glu Leu Gly Phe Leu Leu Phe Ser Leu Thr Met Ala Ile Ile  
325 330 335

Ile Phe Ala Thr Val Met Phe Tyr Ala Glu Lys Gly Ser Ser Ala Ser  
340 345 350

Lys Phe Thr Ser Ile Pro Ala Ala Phe Trp Tyr Thr Ile Val Thr Met  
355 360 365

Thr Thr Leu Gly Tyr Gly Asp Met Val Pro Lys Thr Ile Ala Gly Lys  
370 375 380

Ile Phe Gly Ser Ile Cys Ser Leu Ser Gly Val Leu Val Ile Ala Leu  
385 390 395 400

Pro Val Pro Val Ile Val Ser Asn Phe Ser Arg Ile Tyr His Gln Asn  
405 410 415

Gln Arg Ala Asp Lys Arg Arg Ala Gln Lys Lys Ala Arg Leu Ala Arg  
420 425 430

Ile Arg Ala Ala Lys Ser Gly Ser Ala Asn Ala Tyr Met Gln Ser Lys

435 440 445

Arg Asn Gly Leu Leu Ser Asn Gln Leu Gln Ser Ser Glu Asp Glu Pro

450 455 460

Ala Phe Val Ser Lys Ser Gly Ser Ser Phe Glu Thr Gln His His His

465 470 475 480

Leu Leu His Cys Leu Glu Lys Thr Thr Asn His Glu Phe Val Asp Glu

485 490 495

Gln Val Phe Glu Glu Ser Cys Met Glu Val Ala Thr Val Asn Arg Pro

500 505 510

Ser Ser His Ser Pro Ser Leu Ser Ser Gln Gln Gly Val Thr Ser Thr

515 520 525

Cys Cys Ser Arg Arg His Lys Lys Thr Phe Arg Ile Pro Asn Ala Asn

530 535 540

Val Ser Gly Ser His Arg Gly Ser Val Gln Glu Leu Ser Thr Ile Gln

545 550 555 560

Ile Arg Cys Val Glu Arg Thr Pro Leu Ser Asn Ser Arg Ser Ser Leu

565 570 575

Asn Ala Lys Met Glu Glu Cys Val Lys Leu Asn Cys Glu Gln Pro Tyr

580 585 590

Val Thr Thr Ala Ile Ile Ser Ile Pro Thr Pro Pro Val Thr Thr Pro

595 600 605

Glu Gly Asp Asp Arg Pro Glu Ser Pro Glu Tyr Ser Gly Gly Asn Ile

610 615 620

Val Arg Val Ser Ala Leu

625 630

<210> 2

<211> 214

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: Mammalian ion  
channel protein

<400> 2

Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala

1 5 10 15

Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg

20 25 30

Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser

35 40 45

Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp

50 55 60

Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr

65 70 75 80

Gln Gln Tyr Phe Phe Asp Arg Asp Pro Asp Ile Phe Arg His Ile Leu

85 90 95

Asn Phe Tyr Arg Thr Gly Lys Leu His Tyr Pro Arg His Glu Cys Ile

100 105 110

Ser Ala Tyr Asp Glu Glu Leu Ala Phe Phe Gly Leu Ile Pro Glu Ile

115 120 125

Ile Gly Asp Cys Cys Tyr Glu Glu Tyr Lys Asp Arg Arg Arg Glu Asn

130 135 140

Ala Glu Arg Leu Gln Asp Asp Ala Asp Thr Asp Asn Thr Gly Glu Ser

145 150 155 160

Ala Leu Pro Thr Met Thr Ala Arg Gln Arg Val Trp Arg Ala Phe Glu

165 170 175

Asn Pro His Thr Ser Thr Met Ala Leu Val Phe Tyr Tyr Val Thr Gly

180 185 190

Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Gly Ser

195 200 205

Arg His Asp Lys Ile His

210

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B<sup>1</sup>  
Cane<sup>12</sup>